## AMENDMENTS

## In the Claims:

Please cancel claims 5 and 36 without prejudice, and amend claims 6, 8, 10, 15, 21, 23, 33, 35, 37 and 38 as follows:

- 6. (Twice Amended) The method of claim 33, wherein said tissue specific ligand is an anticancer agent.
- 8. (Twice Amended) The method of claim 33, wherein said tissue specific ligand is a tumor marker.
- 10. (Twice Amended) The method of claim 33, wherein the tissue specific ligand is a folate receptor targeting ligand.
- 15. (Twice Amended) The method of claim 33, wherein the tissue specific ligand is a tumor apoptotic cell targeting ligand or a tumor hypoxia targeting ligand.
- 21. (Twice Amended) The method of claim 33, wherein the tissue specific ligand is glutamate pentapeptide.
- 23. (Twice Amended) The method of claim 33, wherein the tissue specific ligand is an agent that mimics glucose.
- 33. (Once Amended) A method of synthesizing a radiolabeled ethylenedicysteine derivative for imaging comprising the steps:
  - a) obtaining a tissue specific ligand, wherein the tissue specific ligand is an
    anticancer agent, a tumor marker, a folate receptor targeting ligand, a
    tumor apoptotic cell targeting ligand, a tumor hypoxia targeting ligand,
    glutamate pentapeptide, or an agent that mimics glucose;

- b) admixing said ligand with ethylenedicysteine (EC) to obtain an EC-tissue specific ligand derivative; and
- admixing said EC-tissue specific ligand derivative with a radionuclide and a reducing agent to obtain a radionuclide labeled EC-tissue specific ligand derivative, wherein the EC forms an N<sub>2</sub>S<sub>2</sub> chelate with the radionuclide.
- 35. (Once Amended) A method for labeling a tissue specific ligand for imaging, comprising the steps:
  - a) obtaining a tissue specific ligand, wherein the tissue specific ligand is an anticancer agent, a tumor marker, a folate receptor targeting ligand, a tumor apoptotic cell targeting ligand, a tumor hypoxia targeting ligand, glutamate pentapeptide, or an agent that mimics glucose;
  - b) admixing the tissue specific ligand with ethylenedicysteine (EC) to obtain an EC-ligand drug conjugate; and
  - reacting the drug conjugate with  $^{99m}$ Tc in the presence of a reducing agent to form an  $N_2S_2$  chelate between the ethylenedicysteine (with or without linker) and the  $^{99m}$ Tc.
- 37. The method of claim 35, wherein the reducing agent is a dithionite ion, a stannous ion or a ferrous ion.
- 38. (Once Amended) A method of imaging a site within a mammalian body comprising the steps of administering an effective diagnostic amount of a composition comprising a 99mTc labeled ethylenedicysteine-tissue specific ligand conjugate and detecting a radioactive signal from the <sup>99m</sup>Tc localized at the site, wherein the tissue specific ligand is an anticancer agent, a tumor marker, a folate receptor targeting ligand, a tumor apoptotic cell targeting ligand, a tumor hypoxia targeting ligand, glutamate pentapeptide, or an agent that mimics glucose.